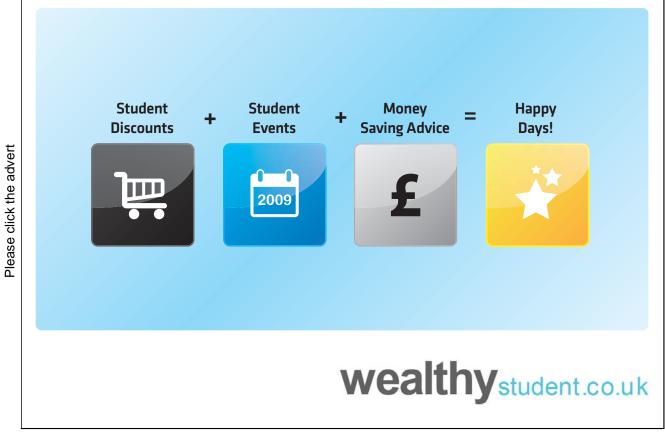
## 3. Conclusive research design

## 3.1 Chapter summary

In previous chapters we discussed marketing research process and problem definition (chapter 1) and research design focusing especially on exploratory research design (chapter 2). In this chapter the topic of research design will be extended to the conclusive research design. The chapter will focus on both descriptive and causal designs. Furthermore, it will specifically elaborate on survey methods and observation as they are one of highly used research techniques for collecting data in present day field of marketing.



## 3.2 Conclusive research design

In the earlier chapter on exploratory research design one could observe that the findings derived from such techniques should be approached with caution due to the issues of generalizability, reliability and validity. However, one also has to remember the depth of insight available from such techniques. Conclusive research design provides a way to verify and quantify the insights gained from exploratory research. Techniques relating to conclusive research are specifically designed to assist the manager in determining, evaluating and selecting the best course of action to take in a given situation.<sup>23</sup> The techniques used in conclusive research contrast with exploratory research as they are typically more formal and structured. Most conclusive research techniques are based on large representative samples and data obtained through is subjected to quantitative analysis. As the findings represent a larger group of respondents many times they are directly used for managerial decision making. At this juncture, it has to be noted that even if the sample used is large, it does not mean that the findings are the voice of all the consumers but this kind of studies provide a general guideline regarding the consumer and market behaviour. In some instances, the research may come close to suggest precise consumer and market behaviour; however in other cases, the research may partially clarify the situation and much will be left to the manager's judgement.

As discussed in chapter 2, conclusive research is classified into two major categories, descriptive and causal. The table below provides the basic differences between exploratory, descriptive and causal designs.

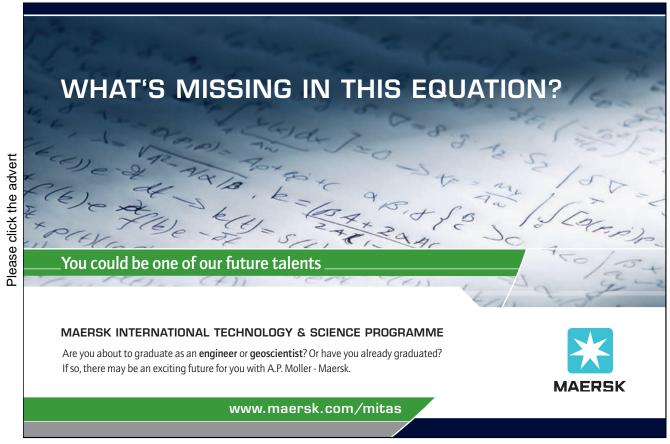
**Table 3.1:**Comparison of research designs

	Exploratory	Descriptive	Causal	
Emphasis	Discovery of ideas and insights	Frequency of occurrences	Determine cause and effect	
Features	Flexible, unstructured	Hypotheses based, structured	Variable control	
Techniques used	Focus groups, in- depth interview, mostly qualitative research	Surveys, observation, panel data, mostly quantitative research	Experimentation	

## 3.3 Descriptive design

As seen in the table above descriptive research design is typically concerned with determining the frequency with which an event occurs or the relationship between two variables. This type of design is typically guided by an initial relationship between two variables. For example, an investigation of the trends to understand the consumption of cola drinks in relation to respondents' age, income, occupation etc. would be a descriptive study. Descriptive research design is quite prevalent in the field of marketing. It is used when the purpose of research is:

- a) To make predictions of market and consumer behaviour. For example, a manager will be highly interested in knowing differences in consumption pattern of cola drinks during different seasons and will be able to develop a marketing campaign accordingly for the forthcoming season.
- b) To describe characteristics of a certain groups. For example, using its loyalty clubcard scheme Tesco (the largest retailer in the UK) is able to identify who are most profitable and least profitable shoppers by developing their generic sociodemographic profile which includes age, spending in Tesco (number of visits and spend per visit), gender, regularly consumed items and less frequently bought items etc.



As it can be seen from the above example, descriptive research design focuses on description however such studies should not be conducted as fact-gathering expeditions. Many times due to the relative ease of conducting such studies managers start these studies with hazy objectives and inadequate planning. This results in much of the data becoming useless for decision-making. Therefore, to be of value, a descriptive study must collect data for a definite purpose. In comparison to exploratory design, descriptive research design requires a clear specification of the who, what, when, where, why and how of the research. Therefore, descriptive research design requires clear planning with regard to collection of data. Unless the study design provides specified methods for selecting sources of information and for collecting data from those sources, the information obtained may be inaccurate or inappropriate.

**Table 3.2:** Dummy table for store preference by income group

Income group	Store preference				
	Store A	Store B	Store C		
Income group A					
Income group B					
Income group C					

To get meaningful results from descriptive studies researchers use methods such as dummy tables and objective-question specification. A dummy table is a table that is used to catalogue the data collected. For example, a manager is interested in knowing has income got an effect on preference of the shopping store selection. The researcher conducting this descriptive study can develop a dummy table as to know how the analysis will be conducted and results will be interpreted. Table above provides an idea of how a dummy table can be prepared. Using the dummy table researcher and manager can agree on the store selection as well as the income group selection. For example, a high end luxury store manager will not be interested in comparing results with a discount store and vice versa. Dummy tables provide further specifications to the research process and enhance the decision making. An alternative method is objective-question specification wherein the objectives behind the descriptive study are matched with the questions asked to the respondent. This technique provides a robust way to keep the research on track and lessens the confusion between the manager and researcher regarding the study.

To facilitate the discussion on descriptive research designs researchers divide descriptive research designs into two categories.

- a) Cross-sectional design
- b) Longitudinal design

## 3.3.1 Cross-sectional design

The cross-sectional design is the most common and most familiar way of conducting marketing research. It involves collection of information from any given sample of population elements only once. In simple terms, cross-section studies are just conducted once. For example, the manager of a cola company wants to know the preference of teenagers regarding their cola brand. This kind of study provides a snapshot of the variables of interest at that point in time, as contrasted to the longitudinal study that provides a series of pictures, which, when pieced together, provide a movie of the situation and the changes that are occurring.

The objective of cross-sectional design many times is to establish categories such that classification in one category implies classification in one or more other categories. For example, a manager believes that gender is an important factor in consumption of their perfumes. Further, he or she also wishes to examine does the age group of a consumer affects their perfume buying behaviour. These hypotheses could be examined in a cross-sectional study. Measurement would be taken from a representative sample of the population with respect to their gender, age group and frequency of buying perfumes. A dummy table for such a research will look as follows:



**Table 3.3**Dummy table for a cross-sectional study

	Age group				
	Group A	Group B	Group C	Group D	
Male					
Female					

As it can be observed, the emphasis would be on the relative frequency of occurrence of the joint phenomenon (i.e. frequency of perfume buying among Male in group A; frequency of perfume buying among Female in group A and so on).

One advancement into the cross-section analysis in recent times is the development of 'cohort analysis'. Cohort analysis consists of a series of surveys conducted at appropriate time intervals. Cohort refers to the group of respondents who experience the same event within the same time interval. A very common analysis emphasis is on birth cohorts or groups of people born within the same time intervals. Analysis techniques such as cohort analysis can provide partial longitudinal data however, a rather serious limitation of such data is that their accuracy depends heavily on the quality of respondents' memories of past events and intentions about future behaviour. It has been established through various studies that consumers' memories are highly unreliable, particularly with respect to things that occurred in past or when they are predicting their future behaviour. The problem becomes increasingly severe as the time frame extends further into past or future.

In recent times, omnibus panels are becoming increasing popular as a source of consumer insights. Omnibus panel consists of a larger number of panel members who are asked about different research issues at various times. For example, 1000 selected members of an omnibus panel consisting of 10,000 members in total may be asked about their attitudes towards advertisements and some of them may be asked in a relatively short period of time about a new product launch. Several commercial firms maintain their own omnibus panels as a source of samples for cross-sectional studies.

## 3.3.2 Longitudinal design

A longitudinal design is much more reliable than a cross-sectional design for monitoring changes over time, because it relies less on consumers' mental capabilities and more frequently monitors events as close to their time of occurrence as feasible. The primary objective of longitudinal design is to monitor change over a period of time. It involves a fixed sample of population elements that is measured repeatedly. The sample remains the same over a period of time, thus providing a series of pictures which, when viewed together, portray a detailed illustration of the situation and changes that are taking place over a period of time. The major difference between cohort analysis and longitudinal design thus is the sample. While longitudinal design adheres to a single sample, it changes every time the

research is conducted in cohort analysis. In simple terms, the same people are studied over time and same variables are measured. For example, a cola company manager wishes to measure the purchase frequency of various brands of cola beverages among consumers over a period of time. For such research questions longitudinal study is a desirable way of measuring the phenomenon accurately.

Sometimes, the term panel is used interchangeably with the term longitudinal design. A panel consists of a sample of respondents, generally households that have agreed to provide information at specified intervals over an extended period. Such panels are called true panels. Longitudinal analysis can be performed only on true panels related data as repeated measurements are required from the same entities over a period of time. Such analysis cannot be conducted using omnibus panels. A true panel is also capable of generating more data directly pertaining to the research for the reasons being: (a) captive sample of willing respondents are likely to tolerate extended interviews and lengthy questionnaire and (b) background details and other demographics information collection is not required every time providing researcher an opportunity to collect more relevant data.<sup>29</sup>

Data obtained from such panels not only provide information on market shares that are based on extended period of time, but also allow the researcher to examine changes in market share over time. These changes cannot be determined by cross-sectional designs.

# 3.3.3 Advantages and disadvantages of cross-sectional and longitudinal designs

Considering that information is available from panels for multiple periods, the unique advantage of longitudinal analysis becomes obvious. A manager can look at changes in individual's behaviour and attempt to relate them to a succession of marketing tactics. For example, change in advertising campaign, change in packaging, price change etc. Furthermore, since the same respondents are measured before and after changes in the marketing variables, small changes in the behaviour are more easily identified than if separate cross-sectional studies were conducted using two or more independent samples.

Although the major advantage of a panel is analytical, panels also have disadvantages with respect to the information collected in a study. This is particularly true with respect to classification information, such as income, education, age and occupation as it may change over a period of time. In many studies, such information is crucial for decision making. Cross-sectional design fails to provide a complete picture in that regard as it just takes a snapshot at a time. Most panel members are compensated for their involvement in the panel and therefore provide an opportunity to capture longer-term data. As stated earlier longitudinal true panels provide an added advantage of collecting more relevant information as the background information of respondents is known.

Panel data are also believed to be more accurate than cross-sectional data because panel data tend to be relatively freer from the errors associated with reporting past behaviour. A typical cross-sectional study requires respondents to recall past purchase and behaviour and these data can be inaccurate due to memory lapses.<sup>30</sup> In comparison, panel data, which rely on continuous recording of purchases in a diary, place less reliance on respondents' memory and therefore are more accurate.<sup>31</sup>

Errors also occur because the interviewer and respondent represent distinct personalities and different social roles. Very often respondents say what they think the interviewer wants to hear or what they feel the interviewer should hear.<sup>32</sup> The panel designs help reduce such interaction bias because of frequent contact and rapport generation between the interviewer and respondents.

While there are many advantages of longitudinal design (consumer panels) over cross-sectional design (one-shot surveys), the consumer panels themselves are not without drawbacks. The main disadvantage of consumer panels is that they are nonrepresentative at times. The agreement to participate involves a commitment on the part of the designated respondent. Some respondents refuse this commitment. Sometimes they are not interested in filling out diaries or test products or evaluate advertising copy. Furthermore, creating a consumer panel in itself is a difficult task as some members of the society are hard to find or hard to reach and many times are not ready to participate at all. Mortality is another concern associated with consumer panels. Furthermore, payments may cause certain group of people to be attracted to a panel making the group unrepresentative. Another disadvantage of panels is the response bias. New panel members are often found to be biased in their initial response.<sup>33</sup> They tend to increase the behaviour being measured, such as food purchasing and consumption. This bias decreases as the respondents overcome the novelty of being on the panel. Furthermore, seasoned panel members also give biased responses, as they want to look good and think they are experts at things.

Because of the potential limitations of true panels, researchers may be wise to restrict their use to situations in which periodic monitoring of the same respondents is essential.

## 3.4 Causal designs

As it can be observed from the above discussion relating to descriptive design that such designs are commonly used as direct bases for marketing decisions. However, one of the common problems is that descriptive designs do not provide direct cause and effect relationships. On the other hand, managers continually make decisions based on assumed causal relationships. As these assumptions are based on intuitions, they are hardly justifiable and validity of such causation should be examined with causal research. For example, one of the common causation related judgements relates to pricing decisions. Managers are constantly facing the challenge of setting the right price and knowing the impact of price increase or decrease on sales, brand image or other such variables is utmost important for

them. Causal design provides answer to such questions by explaining which variables are the cause (independent variables) and which are the effect (dependent variables).

Causal research is most appropriate when the research objectives include the need to understand the reasons why certain market phenomena happen as they do. In other words, causal research helps in understanding which market variable (for example, packaging change) causes what effect on other market variables (supermarket sales). To measure this however, the data must be gathered under controlled conditions – that is, holding constant, or neutralizing the effect of, all variables other than the causation variable (in the case above packaging change). After neutralizing the effects of other variables researchers manipulate the causation variable and measure the change in the effect variable (in the case above supermarket sales). Manipulation of the presumed causal variable and control of other relevant variables are distinct features of causal design.



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Experimentation as a technique is generally used when conducting causal research. There are two kinds of experimentation techniques available to researchers namely (a) laboratory experiment and (b) field experiment. A laboratory experiment is one in which a researcher creates a situation with the desired conditions and then manipulates some while controlling other variables. The researcher is consequently able to observe and measure the effect of the manipulation of the independent variables on the dependent variable or variables in a situation in which the impact of other relevant factors is minimized. A field experiment on the other hand is a research study in a realistic or natural situation, although it too, involves the manipulation of one or more independent variables under as carefully controlled conditions as the situation will permit. As it can be seen from above discussion, that both techniques provide a degree of control and manipulation, the major distinction between these two experiment techniques is the environment.<sup>35</sup> A specially designed laboratory experiment (artificial situation) provides more control however; it might not be able to replicate the natural behaviour completely.

Data collected through experimentation can provide much stronger evidence of cause and effect than can data collected through descriptive research. However, this does not mean that analysis of descriptive research data cannot suggest possible causal links. In fact, rather than viewing descriptive designs versus experimental designs, one should think them as conclusive designs varying from 'prurely descriptive with no control' at one extreme to 'purely experimental with strict control and manipulation' at the other extreme. <sup>36</sup> Virtually all real-life research falls somewhere along this continuum, although where 'descriptive' ends and 'experimentation' begins is subjective. Descriptive designs based data merely suggests causation, while data generated through causal design increases our degree of confidence in any suggested issue.

While experimentation is a robust technique to find causation and assist manager in decision making there are several limitation associated with it. These limitation mostly concern with the time involved in experimentation, costs and administration difficulties. Descriptive designs in comparison are less time consuming, less costly and easy to administer. These advantages have made descriptive designs more popular in comparison to causal designs. In the next section we will discuss two of the most popular descriptive data collection techniques namely, survey methods and observation.

## 3.5 Survey methods

Survey methods tend to be the mainstay of marketing research in general. They tend to involve a structured questionnaire given to respondents and designed to elicit specific information. In simple terms, it involves questioning the respondents regarding the issue at hand and asking their opinion about it. Respondents are asked variety of questions regarding their feelings, motivations, behaviour, attitudes, intentions, emotions, demographics and such other variables. The questions are asked via direct face to face contact, post, telephone or internet. The responses are recorded in a structured, precise manner. In most cases, for conducting survey research, research problems or opportunities are well defined and there is agreement in the precise data requirement between manager and the researcher.

The survey method is popular for various reasons. One of the major reasons is that data collection is a function of correctly designing and administering the survey instrument (i.e. a questionnaire). This means unlike exploratory design based techniques survey methods rely less on communication, moderation and interpretation skills of the researcher. Survey research allows the researcher to create information for precisely answering who, what, how, where and when questions relating to the marketplace. Furthermore, survey methods have ability to accommodate large sample size and therefore increase generalizability of results. While exploratory designs provide a detailed picture, due to various biases involved with regard to interviewer (moderator) communication and interpretation, details mentioned by the respondent may get skewed. In case of survey methods researcher can easily distinguish small differences. Furthermore, researcher can easily adopt robust advance statistical methods on collected data for gaining results. Such advantages make survey methods quite popular.

While survey methods provide several advantages, they are not without limitations. These limitations stem mostly from instrument development, respondent errors and response bias. Developing accurate survey instruments is a difficult task and at times is time consuming. Furthermore, due to instrument measurement being structured in nature, in-depth and detailed data structures as gathered in exploratory research cannot be collected. One of the major problems with survey methods is to determine whether the respondents are responding truthfully or not. There is little cross-checking and flexibility available in comparison to exploratory designs. There is also a possibility of misinterpretations of data results and employment of inappropriate statistical analysis procedure.

There are four main types of survey methods namely, (a) personal interviews; (b) telephone interviews; (c) mail interviews and (d) online interviews. In the next section we shall deal with each of these techniques in details.

#### 3.5.1 Personal interviews

Personal interviews are one of the most used survey methods in marketing research. In this technique the survey instrument (mostly a questionnaire) is administered by a trained interviewer who asks questions and record the respondent's answers. While personal interview is still quite popular, the recent advancements in communication technology such as internet are slowly gathering momentum. Nonetheless, personal interviews techniques will continue to be employed by researchers in the future, just at a lower frequency than in past years.<sup>37</sup>

There are various ways in which the personal interviews are conducted. The major types are in-home interviews, executive interviews, mall-intercept interviews and purchase-intercept interviews. In-home interviews are conducted in respondent's home with a structured question and answer exchange between interviewer and the respondent. As the respondent is in the comfort of their home the likelihood of them answering the questions is higher in comparison. In case of executive interview, the exchange happens in the office of the business executive. These types of interviews are conducted to gather industry related or market

related information. Mall-intercept interviews, as the name suggests, are face-to-face personal interviews which take place in a shopping mall. Mall shoppers are stopped and asked for feedback or certain issues. In case of purchase-intercept interviews respondents are stopped and asked for feedback on the product bought.

Each of the above mentioned technique has its own advantage and disadvantage. While inhome and executive interviews provide comfortable environment advantage, they are time consuming and expensive. Mall intercept interviews are less expensive however; consumer willingness to talk in a shopping mall as well as the bias of the environment cannot be negated. Purchase intercept interviews are a robust method to avoid memory loss related problems however, there is a response bias as those consumers who decided not to buy the product are excluded and at the same time willingness of those who bought the product to talk about it becomes an issue.

In comparison to other techniques (telephone, mail and internet) personal interviews are expensive and time consuming. However, are useful when dealing with complex questions which require clarifications. The response rate for personal interviews is higher in comparison to other methods as respondents find it hard to refuse someone face-to-face.



## 3.5.2 Telephone interviews

Telephone interviewing is quick and relatively inexpensive because respondents can be contacted more quickly, lowering the labour costs. The researcher can also reach houses and people who cannot be reached via personal interviews. In simple terms, telephone interviews are personal interviews conducted over telephone. An added advantage of this technique is that interviews still can be closely supervised if the interviews are being carried out from a single central location. Researchers can record the calls and review them later. Furthermore, this technique allows the possibility of follow up as the respondents (if they did not provide answer in an earlier interview) can be reached again. Furthermore, it has been observed that respondents perceive telephone interviews to be more anonymous in comparison to personal interviews and divulge more details. The technique is also quite useful in conducting executive interviews as sometimes executives are not ready for personal interviews but do answer telephone calls.

This method does possess several disadvantages also such as; the respondent might not be ready to be a part of the interview. Secondly, visual stimuli such as pictures of drawing cannot be seen by a respondent and so it may become difficult for them to talk about new product experiences or such other phenomena. Furthermore, complex tasks cannot be performed in telephone interviews. For example, a structure scale with different scaling of agreement/disagreement or like/dislike preference will be hard to administer on telephone. Added to that, the telephone interviews tend to be short in comparison to personal interviews as respondents generally do not like long telephone interviews.

In recent year, Computer Assisted Telephone Interviewing (CATI), has become quite popular than tradition telephone methods. CATI uses a computerized questionnaire administered to respondents over telephone. The interviewer sits in front of a computer and wears a headset. The computer replaces the pencil and paper and headset replaces the telephone. The interviewer reads the questions posed on the computer screen and records the answer by the respondent directly on the screen. The computer systematically guides the interviewer showing one question at a time.

Using more sophisticated software, researchers have also devised fully automated telephone interviewing data collection process which is called – Completely Automated Telephone Survey (CATS). This system uses no human interviewer. The survey is completely administered by a computer only. The respondent listens to a pre-recorded human voice and is asked to punch keys on their telephone to suggest their views. CATS has successfully been used in service quality monitoring surveys, customer satisfaction surveys, and even pre-election day polls. <sup>38</sup> In recent years, however, due to the negative perception relating to telemarketing, use of this technique has decreased.

#### 3.5.3 Mail interviews

Mail interviews are relatively inexpensive in comparison to personal and telephone interviews as the administration costs involve, questionnaire, covering letter, response paid envelop, associated material and postal charges. In the traditional mail interview, questionnaires are mailed to preselected potential respondents. The researchers have to be careful in selecting a list that accurately reflects the target population. Sometimes obtaining the required mailing addresses is an easy task, but in other cases it may prove to be time-consuming and difficult.

Mail interviews provide cost advantage. Furthermore, they also provide advantage with regard to the length of the questionnaire. Questionnaires can be fairly long in comparison to personal or telephone interviewing. However, mail interviews have relatively low response rate. The response bias tends to be high in mail interview as the interview has no control over the process. The researcher has no way to find out who filled the survey and at the same time researcher has no control over who will send the response back. Another major problem with mail interviews is the misinterpreted or skipped questions by the respondents. Mail interviews make it difficult to handle problems of both vagueness and potential misinterpretations in question and answer setup as the respondents do not have a possible feedback mechanism. This may results in people providing unclear or at times wrong answer and also may skip the question entirely. While they are inexpensive, mail interviews can also be time consuming as respondent may take time to answer the questions and return them back.

Some of the disadvantages of mail interviews have been tackled by research organization by using mail panels. Mail panels consist of members who have agreed in advance to participate. This way high response rates are achieved in timely fashion with low costs. Most longitudinal studies are carried out with such mail panels. While mail panels provide several advantages the major draw back associated with them is representativeness. They might not be the right group to represent the topic or issue at hand. Researchers have also used personalization (in covering letter) and provision of incentives in increasing mail interview related responses.

#### 3.5.4 Online interviews

The rise of internet technologies has created unforeseen changes in the world of marketing research. Internet provides interactivity, faster data acquisition, retrieval and reporting. The use of internet technologies in marketing research has been titled as online interviewing. The traditional survey methods now-a -days are tagged as offline interviewing. Online interviewing provides the fundamental advantages of all the offline methods however adds the interactivity and speed as stated earlier. Online interviews are conducted either by emails or administered on the internet using a specific website.

An email based interview is conducted using email lists. The questionnaire is written within the body of the email and respondents are asked to reply via email. Once the response is received the data is entered and tabulated using various office or statistical software. The

questions in email interviews can either be open or close ended. Email based interviews have several limitation in providing interactivity as well as handling complex questions.

The limitations of email based interviews are solved by using internet website based interviews. The respondents are asked to go to a particular webpage to completely the survey. The list of respondents is obtained from mailing lists or at times asking panel members in offline channels to register for the online channel. Internet interviews provide many advantages over email based surveys as they allow interactivity and graphic addition within the survey. Furthermore, the data collected can be gathered in format which is ready for analysis in office or statistical software. This kind of research can be as representative and effective as other traditional methods, especially as the internet population continues to grow. However, it must be kept in mind that not all survey methods are appropriate in a given situation. Therefore, the researcher should conduct a comparative evaluation to determine which methods are appropriate.

### 3.6 Observation

In observation studies, the researcher observes the behaviour of consumers in real-life setting. This type of research originated in anthropology and has percolated into many other fields of research. There is a still a debate among researchers as to whether observation is a qualitative or quantitative technique. Observation methods are widely used in organization research to examine how people behave in groups, in teams and as organization members. This technique is also used in recruitment and selection of new employees as well as promoting existing employees in many organizations. The observation studies are extremely useful in collecting behavioural data as oppose to attitudinal data. This technique allows marketers to collect data on what people actually do, rather than what they say they will do.<sup>41</sup>

The main characteristic of all observation techniques is that researcher must rely heavily on their powers of observing rather than actually communicating with people to collect primary data. Using observation a lot of different information about the behaviour of people and objects can be observed including their physical actions (e.g. shopping patterns), expressive behaviours (e.g. expressions in engaging with various products and services); verbal behaviour (e.g. respondent conversation); temporal behavioural patterns (e.g. time spent in activities); spatial relationships and locations (e.g. location and brand associations); and so on. The type of data acquired can be used to amplify or reinforce other data patterns collected through other research designs by providing complimentary evidence concerning respondent's true feelings related to a product or brand. Observation is used quite regularly in retailing. Via observation retailers get useful information relating to areas of high versus low footfall; high versus low profit making product and consumer engagement with them; among other. It was through observation only; we understood the impact of product placement at eye-level for various groups of consumers.

Observation techniques have several advantages and disadvantages. One of the most important advantages of observation techniques is the accurate collection of behavioural data in real-life setting. In addition, observation techniques help in reducing the recall error (memory loss), response bias and refusal to participate. Mechanical audio-visual devices provide researchers opportunity to gather accurate observational data which provides in-depth insights into consumer behaviour. On the other hand, one of the major limitations of observation techniques is the data generalization. It is difficult to make accurate prediction of larger consumer groups, thus representativeness becomes an issue in observation. Furthermore, it is not easy to interpret behaviour as to why a respondent behaved in a certain way. Furthermore, observations being a real-time phenomenon it is very hard to observe all the behavioural actions of the targeted consumers.



#### 3.6.1 Methods of observation

The choice relating to the methods of observation depends on researchers need for (a) directness of approach; (b) respondent's awareness of being observed; (c) the rigour of information and structure and (d) observation recording method. With regard to directness researchers can choose either use disguised observation or undisguised observation. In disguised observation the respondent is unaware that s/he is being observed. The reason for disguised observation is that respondents tend to behave differently when they know they are being observed. In case of structured observation researcher clearly defines the behaviours to be observed and the method by which they will be measured. On the other hand, with unstructured observation researcher observes all aspects of the phenomenon without specifying the details in advance. The recording can be done by human observer or by mechanical devices.

### 3.7 Conclusion

In this chapter, we focused on types of conclusive research designs. Conclusive research is conducted to test specific hypothesis or examine specific relationships. The findings from the conclusive research are mostly generalizable, reliable and valid due to the usage of structured research methods and rigorous statistical analysis. Conclusive research findings are used as an input by managers in the decision making process. Conclusive research can be of two types: descriptive or causal.

Descriptive research design is employed to describe a market phenomenon or characteristics. It requires clear structure and general agreement between manager and researcher as to what is being measured. Descriptive research can be further classified into cross-sectional and longitudinal research. Cross-sectional research involves collection of information from respondents at a single point in time. On the other hand, longitudinal research involves repeated measurement from the same respondents over a long period of time. Causal designs are primarily employed to specify the cause and effect relationship between variables. Experimentation as a technique is widely used in causal designs.

Survey methods and observation are the two highly used techniques for obtaining primary quantitative data. Survey methods involve direct questioning of the respondents. There are several ways in which surveys are carried out including; personal interviews, telephone interviews, mail interviews and online interviews.

Observations provide an opportunity to collect highly valuable behavioural information when used in right fashion. From a manager's perspective, observation and survey methods provide complimentary information and should be used as complimentary techniques rather than competitive techniques by researchers.